

*Bos brachyceros, the West-African Buffalo, and the Dwarf Buffalo of Pennant.* By Dr. J. E. GRAY, F.R.S. &c.

Sir Victor Brooke, in the P. Z. S. 1873, p. 474, has given a very good account, illustrated with some admirable figures, of the head and skulls of a species of buffalo, *Bos brachyceros*, and has changed the name to that of *Bos pumilus* because he thinks it is the dwarf animal described by Belon as coming from Morocco. Should it prove to be the Morocco animal, which I greatly doubt, I wonder it has not occurred to Sir V. Brooke that *B. pumilus* is a very inappropriate name for a buffalo as large or larger than the Cape buffalo; and I may observe that his synonyma, compiled with such appearance of care, are really very untrustworthy, as I have found them on several other occasions.

Belon, in his 'Voyage,' pp. 119 & 120, mentions and very roughly figures an animal under the name of "un moult beau plus petit bœuf d'Afrique," which he saw at Cairo, but which was said to have been brought from Assaimie on the coast of Morocco.

Linnaeus, in the 12th edition of the 'Systema Naturæ,' vol. i. p. 99, refers to this account, and considers it a variety of his *Bos indicus*, quoting it under the name of *Bubalus africanus*, observing that he believes it to be the same species as *B. indicus*. The account of the animal gives no means of determining to what it belonged; but it may be, from its habitat, *Bos dante* or the African zebu.

Pennant, in his 'Synopsis of Quadrupeds,' p. 9, finds a species, under the name of the dwarf ox, entirely on Belon's description, adding that he thinks a pair of horns in the Museum of the Royal Society, noticed by Grew, belonged to this species. He also says that perhaps the lant or dant described by Leo Africanus may belong to this kind. In his next edition, called the 'History of Quadrupeds,' p. 31, and in the 3rd edition, p. 36, he leaves out all reference to these horns under the dwarf ox; but in the 1st edition of the 'History' he repeats the plate that was in the 'Synopsis,' but in the account of the plates he refers to the figure as that of the young Cape buffalo; and in the 3rd edition he leaves out the figures of these horns. In the text of both editions he refers to the horns under the account of the Cape buffalo, saying that he believes they belong to that species.

Turton, in 'A General System of Nature,' published in 1806, which is chiefly a translation of Gmelin, has a species which he calls *Bos pumilus*, from what seems to be Pennant's description of the dwarf ox; but he does not give any reference to that author, whose name he uses, and he refers to the lant of Pennant as *Bos taurus*, var. *h.*, called the African ox. *Bos pumilus* of Turton entirely reposes on the dwarf ox of Pennant, which is founded on the "*petit bœuf*" of Belon; and this neither in the account of the animal, the size, nor the habitat agrees with the West-African Buffalo, which has any thing but a shining coat or horns like Belon's figure.

Grew, in his account of the "Rarities in the Museum of the Royal Society," p. 26, mentions the horns of a wild bull called *Bubalus sive Buffalus*, brought from Africa.

Pennant, in his 'Synopsis of Quadrupeds,' p. 97, refers to and

figures this pair of horns (t. viii. f. 3), which is evidently that of a very young animal, and thinks it belongs to the dwarf ox, p. 9; but in the 'History of Quadrupeds,' p. 28, under the Cape ox, he observes, "The horns (t. iii. f. 9) of my former edition, which I attributed to the next species (the dwarf ox) most probably are those of the young of this kind;" this account is repeated and the figure left out in the 3rd edition of the 'History,' p. 33; so that we have Pennant's own authority for saying that these horns were not those of his dwarf ox, on which the name *Bos pumilus* of Turton was founded, and therefore that the change of name made by Sir V. Brooke, like many other of his synonyma, is entirely founded on a mistake, or, in fact, on the want of sufficient research.

The pair of horns in Grew is in the British Museum, is figured in our 'Catalogue of Ruminants,' was described by Blyth under the name of *Bubalus reclinis*; and I believe that we have no authority for their being considered the young of *Bos brachyceros*, or at least that Sir V. Brooke has as yet shown no reason for regarding *Bos reclinis* and *B. planiceros*, Blyth, as the young of *Bos brachyceros*, and therefore that the first of the two conclusions that Sir Victor Brooke arrives at, viz. "the identity of *pumilus* of Turton with *brachyceros*, Gray," is entirely erroneous; and as to the second, we have no means of knowing, not having specimens to refer to.

I make these remarks because compilers will be misled by the apparent care and speciality with which the synonyms are quoted; and it is to be observed that synonyms so compiled are very apt to mislead, and thus be injurious to the progress of science.

To show the little reliance that can be placed on Sir Victor Brooke's statement of his pretended history of the dwarf ox (in the Proc. Zool. Soc. 1873, p. 476), I may observe:—First, he states that Pennant's dwarf bull was established on the horns in the Museum of the Royal Society, whereas it was entirely founded on Belon's account of the "petit bœuf d'Afrique" from Morocco. Pennant, in his 'Synopsis,' p. 9, thinks that the horns mentioned by Grew might belong to it; but in his 'History,' published ten years afterwards, he says they are "most probably those of a young Cape ox," observing that "Grew improperly thinks them the horns of the common *buffalo*" (p. 28). Secondly, he states that Turton gives the name of *B. pumilus* to "the same" (that is Grew's) specimen. Turton merely gives an abridgment of Pennant's account of the dwarf ox from Belon, and makes no reference to the horns described by Grew, nor even to the figure of them. This is a very fair specimen of the accuracy of Sir Victor Brooke's observations and conclusions therefrom. I can scarcely allow it to pass without a protest against his remark, "the very slight interest which Dr. Baikie appears to have taken in natural history" (p. 478), because his specimens in the Museum are without special habitats. All who knew Dr. Baikie, and any body who has seen his numerous specimens in the British Museum, must feel the falseness of this accusation. Dr. Baikie died on the Niger, a sacrifice to his scientific zeal; and his specimens were received in the Museum some time after his death, after they had passed through two hands at least, and their history was lost.